U.S. Application No. 10/580,700

Second Preliminary Amendment Dated: January 9, 2007

## Amendments to the Claims:

This listing of claims will replace all prior versions, and listings, of claims in the application:

## **Listing of Claims:**

Claims 1-10 (Cancelled).

Claim 11 (Previously Presented): A method for treating, controlling, preventing or protecting animals against infestation or infection by parasites comprising orally, topically or parenterally administering or applying to the animals a parasiticidally effective amount of a compound of formula I

$$\bigvee_{B=A}^{n} \bigcap_{N=Q}^{R}$$
 (I)

wherein

Q is

$$N = \stackrel{NR^1R^2}{R^3}$$
,  $N = \stackrel{X^1}{R^3}$ , or  $\stackrel{R^4}{N} = \stackrel{O}{R^3}$ 

X<sup>1</sup> is chlorine, bromine, or fluorine;

R<sup>1</sup>, R<sup>2</sup> are each independently hydrogen, C<sub>1</sub>-C<sub>10</sub>-alkyl, C<sub>3</sub>-C<sub>10</sub>-alkenyl, C<sub>3</sub>-C<sub>10</sub>-alkynyl, or C<sub>3</sub>-C<sub>12</sub>-cycloalkyl, C<sub>1</sub>-C<sub>6</sub>-alkylamino, di(C<sub>1</sub>-C<sub>6</sub>-alkyl)-amino, C<sub>1</sub>-C<sub>6</sub>-alkylcarbonylamino, C<sub>1</sub>-C<sub>6</sub>-alkylsulfonyl, or C<sub>1</sub>-C<sub>6</sub>-alkylsulfinyl, wherein the carbon atoms in these groups may be substituted with

1 to 3 halogen, hydroxy, nitro, cyano, amino, mercapto, C<sub>1</sub>-C<sub>6</sub>-alkoxy, C<sub>1</sub>-C<sub>6</sub>-haloalkoxy, C<sub>1</sub>-C<sub>6</sub>-alkylthio, C<sub>1</sub>-C<sub>6</sub>-haloalkylthio, C<sub>1</sub>-C<sub>6</sub>-alkylsulfonyl, C<sub>1</sub>-C<sub>6</sub>-haloalkylsulfonyl, C<sub>1</sub>-C<sub>6</sub>-haloalkylsulfonyl, C<sub>1</sub>-C<sub>6</sub>-haloalkylsulfinyl, or C<sub>3</sub>-C<sub>6</sub>-cycloalkyl which may be substituted with 1 to 3 R<sup>#</sup> groups, or

 $R^{\#}$  is halogen, cyano, nitro, hydroxy, mercapto, amino,  $C_1$ - $C_6$ -alkoxy,  $C_2$ - $C_6$ -alkenyloxy,  $C_2$ - $C_6$ -alkynyloxy,  $C_1$ - $C_6$ -haloalkoxy,  $C_1$ - $C_6$ -alkylthio, or  $C_1$ - $C_6$ -haloalkylthio,  $C_1$ - $C_6$ -alkylsulfinyl,  $C_1$ - $C_6$ -alkylamino, di( $C_1$ - $C_6$ alkyl)-amino,  $C_1$ - $C_6$ -alkylcarbonyl,  $C_1$ - $C_6$ -alkoxycarbonyl, or di( $C_1$ - $C_6$ )-alkylaminocarbonyl;

U.S. Application No. 10/580,700

Second Preliminary Amendment Dated: January 9, 2007

formyl, C<sub>1</sub>-C<sub>6</sub>-alkylcarbonyl, C(=O)NR<sup>a</sup>R<sup>b</sup>, CO<sub>2</sub>R<sup>c</sup>, R<sup>d</sup>, R<sup>e</sup>, phenyl which may be substituted with 1 to 3 R<sup>#</sup> groups, or pyridyl which may be substituted with 1 to 3 R<sup>#</sup> groups,

 $R^a$ ,  $R^b$ ,  $R^c$  are each independently hydrogen or  $C_1$ - $C_4$ -alkyl which may be substituted with 1 to 3 groups  $R^{\#}$ ;

R<sup>d</sup> is NR<sup>i</sup>R<sup>j</sup> or

$$N \stackrel{(CH_2)_p}{\swarrow} X_r$$
 or  $CH \stackrel{(CH_2)_p}{\swarrow} X_r$ 

- R<sup>i</sup>, R<sup>j</sup> are each independently hydrogen or C<sub>1</sub>-C<sub>4</sub>-alkyl which may be substituted with 1 to 3 groups R<sup>#</sup>;
- p, m are each independently 0, 1, 2, or 3, with the proviso that p and m are not both 0;
- X is oxygen, sulfur, amino, C<sub>1</sub>-C<sub>4</sub>-alkylamino, or phenylamino, or, if p is 0 then X can also be phenoxy or C<sub>1</sub>-C<sub>6</sub>-alkoxy; r is 0 or 1;

R<sup>e</sup> is

 $R^k$ ,  $R^q$  are each independently hydrogen or  $C_1$ - $C_4$ -alkyl which may be substituted with 1 to 3 groups  $R^\#$ ; or

R<sup>1</sup> and R<sup>2</sup> may be taken together to form a ring represented by the structure

$$N \xrightarrow{(CHZ)_p} X'_r$$

p, m are 1, 2 or 3;

- X' is oxygen, sulfur, amino, C<sub>1</sub>-C<sub>4</sub>-alkylamino, phenylamino, or methylene;
- Z is  $C_1$ - $C_4$ -alkyl or phenyl;
- R<sup>3</sup> is hydrogen, C<sub>1</sub>-C<sub>10</sub>-alkyl, C<sub>2</sub>-C<sub>10</sub>-alkenyl, C<sub>2</sub>-C<sub>10</sub>-alkynyl, C<sub>3</sub>-C<sub>12</sub>-cycloalkyl, wherein the carbon atoms in these groups may be partially or fully halogenated or substituted with

U.S. Application No. 10/580,700

Second Preliminary Amendment Dated: January 9, 2007

1 to 3 cyano, nitro, hydroxy, mercapto, amino,  $C_1$ - $C_6$ -alkyl,  $C_3$ - $C_6$ -cycloalkyl,  $C_1$ - $C_6$ -alkoxy,  $C_1$ - $C_6$ -alkylamino, di( $C_1$ - $C_6$ -alkyl)-amino,  $C_1$ - $C_6$ -alkylthio,  $C_1$ - $C_6$ -alkylsulfonyl, or  $C_1$ - $C_6$ -alkylsulfinyl groups, wherein the carbon atoms in these groups may be substituted by

1 to 3 halogen atoms, a 5- to 6-membered aromatic ring system which may contain 1 to 4 heteroatoms selected from oxygen, sulfur and nitrogen and which may be substituted with any combination of 1 to 5 halogen atoms, 1 to 3 C<sub>1</sub>-C<sub>6</sub>-alkyl, C<sub>1</sub>-C<sub>6</sub>-alkylthio, C<sub>1</sub>-C<sub>6</sub>-alkylsulfonyl, C<sub>1</sub>-C<sub>6</sub>-alkylsulfinyl, C<sub>1</sub>-C<sub>6</sub>-alkoxy, nitro, or cyano groups, wherein the carbon atoms in these groups may be substituted by 1 to 3 halogen atoms, or

phenoxy, which may be substituted with any combination of 1 to 5 halogen atoms, 1 to 3 C<sub>1</sub>-C<sub>6</sub>-alkyl, C<sub>1</sub>-C<sub>6</sub>-alkylthio, C<sub>1</sub>-C<sub>6</sub>-alkylsulfinyl, C<sub>1</sub>-C<sub>6</sub>-alkoxy, nitro, or cyano groups, wherein the carbon atoms in these groups may be substituted by 1 to 3 halogen atoms, or

a 3- to 6-membered saturated or partially unsaturated ring system which contains 1 to 3 heteroatoms selected from oxygen, sulfur and nitrogen and which may be substituted with any combination of 1 to 5 halogen atoms, 1 to 3 C<sub>1</sub>-C<sub>6</sub>-alkyl, C<sub>1</sub>-C<sub>6</sub>-alkylthio, C<sub>1</sub>-C<sub>6</sub>-alkylsulfonyl, C<sub>1</sub>-C<sub>6</sub>-alkylsulfinyl, C<sub>1</sub>-C<sub>6</sub>-alkoxy, nitro, or cyano groups, wherein the carbon atoms in these groups may be substituted by 1 to 3 halogen atoms,

a 3- to 6-membered saturated or partially unsaturated ring system which contains 1 to 3 heteroatoms selected from oxygen, sulfur and nitrogen and which is unsubstituted or substituted with any combination of 1 to 5 halogen atoms, 1 to 3 C<sub>1</sub>-C<sub>6</sub>-alkyl, C<sub>1</sub>-C<sub>6</sub>-alkylthio, C<sub>1</sub>-C<sub>6</sub>-alkylsulfonyl, C<sub>1</sub>-C<sub>6</sub>-alkylsulfinyl, C<sub>1</sub>-C<sub>6</sub>-alkoxy, C<sub>1</sub>-C<sub>6</sub>-haloalkoxy, nitro, or cyano groups, wherein the carbon atoms in these groups may be substituted by 1 to 3 halogen atoms;

R,  $R^4$  are each independently hydrogen or  $C_1$ - $C_6$ -alkyl,  $C_1$ - $C_6$ -alkoxycarbonyl,  $C_1$ - $C_6$ -alkylaminocarbonyl, or di( $C_1$ - $C_6$ -alkyl)-aminocarbonyl, wherein the carbon atoms in the these groups may be substituted with 1 to 3 groups  $R^{\#}$ ;

U.S. Application No. 10/580,700

Second Preliminary Amendment Dated: January 9, 2007

A is  $C-R^5$  or N;

B is  $C-R^6$  or N;

W is C-R<sup>7</sup> or N;

with the proviso that one of A, B and W is other than N;

- R<sup>5</sup>, R<sup>6</sup>, R<sup>7</sup> are each independently hydrogen, halogen, nitro, cyano, amino, mercapto, hydroxy, C<sub>1</sub>-C<sub>10</sub>-alkyl, C<sub>2</sub>-C<sub>10</sub>-alkenyl, C<sub>2</sub>-C<sub>10</sub>-alkynyl, C<sub>3</sub>-C<sub>6</sub>-cycloalkyl, C<sub>1</sub>-C<sub>6</sub>-alkoxy, C<sub>1</sub>-C<sub>6</sub>-alkylamino, di(C<sub>1</sub>-C<sub>6</sub>-alkyl)-amino, C<sub>1</sub>-C<sub>6</sub>-alkylthio, C<sub>1</sub>-C<sub>6</sub>-alkylsulfonyl, or C<sub>1</sub>-C<sub>6</sub>-alkylsulfinyl, wherein the carbon atoms in these groups may be substituted with 1 to 3 groups R<sup>#</sup>
  - a 5- to 6-membered aromatic ringsystem which may contain 1 to 4 heteroatoms selected from oxygen, sulfur and nitrogen and which may be substituted with any combination of 1 to 5 halogen atoms, 1 to 3 C<sub>1</sub>-C<sub>6</sub>-alkyl, C<sub>1</sub>-C<sub>6</sub>-haloalkyl, C<sub>1</sub>-C<sub>6</sub>-alkylthio, C<sub>1</sub>-C<sub>6</sub>-haloalkylthio, C<sub>1</sub>-C<sub>6</sub>-alkylsulfinyl, C<sub>1</sub>-C<sub>6</sub>-haloalkylsulfonyl, C<sub>1</sub>-C<sub>6</sub>-haloalkylsulfinyl, C<sub>1</sub>-C<sub>6</sub>-haloalkylsulfinyl, C<sub>1</sub>-C<sub>6</sub>-haloalkoxy, mercapto, hydroxy, amino, nitro, or cyano groups, wherein the carbon atoms in these groups may be substituted with 1 to 3 groups R<sup>#</sup>;
- Y is hydrogen, halogen, cyano, nitro, amino, hydroxy, mercapto, C<sub>1</sub>-C<sub>6</sub>-alkyl, C<sub>2</sub>-C<sub>10</sub>-alkenyl, C<sub>2</sub>-C<sub>10</sub>-alkynyl, C<sub>3</sub>-C<sub>6</sub>-cycloalkyl, C<sub>1</sub>-C<sub>6</sub>-alkoxy, C<sub>1</sub>-C<sub>6</sub>-alkylamino, di(C<sub>1</sub>-C<sub>6</sub>)-alkylamino, C<sub>1</sub>-C<sub>6</sub>-alkylthio, C<sub>1</sub>-C<sub>6</sub>-alkylsulfonyl, or C<sub>1</sub>-C<sub>6</sub>-alkylsulfinyl, wherein the carbon atoms in these groups may be substituted with 1 to 3 groups R<sup>#</sup>;

n is 0, 1, or 2;

or the enantiomers or diastereomers, veterinarily acceptable salts or esters thereof.

Claim 12 (Previously Presented): The method according to claim 11 wherein the compound of formula I is a compound of formula I-B

U.S. Application No. 10/580,700

Second Preliminary Amendment Dated: January 9, 2007

$$R^7$$
 $N$ 
 $N$ 
 $N$ 
 $R^3$ 
 $R^{31}$ 
 $R^{31}$ 
 $R^{32}$ 
 $R^{31}$ 
 $R^{31}$ 
 $R^{32}$ 
 $R^{31}$ 

wherein

R<sup>7</sup> is chlorine or trifluoromethyl;

R<sup>5</sup> and Y are each independently chlorine or bromine;

R<sup>2</sup> is C<sub>1</sub>-C<sub>6</sub>-alkyl, C<sub>3</sub>-C<sub>6</sub>-alkenyl, C<sub>3</sub>-C<sub>6</sub>-alkynyl, or C<sub>3</sub>-C<sub>6</sub>-cycloalkyl which may be substituted with 1 to 3 halogen atoms, or C<sub>2</sub>-C<sub>4</sub>-alkyl which is substituted by C<sub>1</sub>-C<sub>4</sub>-alkoxy;

 $R^{31}$  and  $R^{32}$  are  $C_1$ - $C_6$ -alkyl or may be taken together to form  $C_3$ - $C_6$ -cycloalkyl which may be unsubstituted or substituted by 1 to 3 halogen atoms;

R<sup>33</sup> is hydrogen or C<sub>1</sub>-C<sub>6</sub>-alkyl,

or the enantiomers or veterinarily acceptable salts thereof.

Claim 13 (Previously Presented): The method according to claim 11 wherein the compound of formula I is a compound of formula I-1

Claim 14 (Previously Presented): The method according to claim 11 wherein the compound of formula I is a compound of formula I-2

Attorney Docket No. BASF.10153WOUS Page 7 of 14

International Application No.: PCT/EP2004/013685 International Filing Date: December 2, 2004

U.S. Application No. 10/580,700

Second Preliminary Amendment Dated: January 9, 2007

Claim 15 (Previously Presented): The method according to claim 11 wherein the parasites are selected from the Diptera, Siphonaptera, and Ixodida orders.

Claim 16 (Previously Presented): The method according to claim 12 wherein the parasites are selected from the Diptera, Siphonaptera, and Ixodida orders.

Claim 17 (Previously Presented): The method according to claim 13 wherein the parasites are selected from the Diptera, Siphonaptera, and Ixodida orders.

Claim 18 (Previously Presented): The method according to claim 14 wherein the parasites are selected from the Diptera, Siphonaptera, and Ixodida orders.

Claim 19 (Previously Presented): The method according to claim 11 wherein the animals are cats or dogs.

Claim 20 (Previously Presented): The method according to claim 12 wherein the animals are cats or dogs.

Claim 21 (Previously Presented): The method according to claim 13 wherein the animals are cats or dogs.

Claim 22 (Previously Presented): The method according to claim 14 wherein the animals are cats or dogs.

Claim 23 (Previously Presented): The method according to claim 15 wherein the animals are cats or dogs.

Claim 24 (New): A process for the preparation of a composition for treating, controlling, preventing or protecting animals against infestation or infection by parasites, the process comprising:

providing a parasiticidally effective amount of a compound of formula I:

$$\bigvee_{B=A}^{\gamma_n} \bigvee_{N=Q}^{R} (I)$$

wherein

Q is

International Application No.: PCT/EP2004/013685 International Filing Date: December 2, 2004 U.S. Application No. 10/580,700

Second Preliminary Amendment Dated: January 9, 2007

$$N = \stackrel{NR^1R^2}{R^3}$$
,  $N = \stackrel{X^1}{R^3}$ , or  $\stackrel{R^4}{N} = \stackrel{O}{R^3}$ 

X<sup>1</sup> is chlorine, bromine, or fluorine;

R<sup>1</sup>, R<sup>2</sup> are each independently hydrogen, C<sub>1</sub>-C<sub>10</sub>-alkyl, C<sub>3</sub>-C<sub>10</sub>-alkenyl, C<sub>3</sub>-C<sub>10</sub>-alkynyl, or C<sub>3</sub>-C<sub>12</sub>-cycloalkyl, C<sub>1</sub>-C<sub>6</sub>-alkylamino, di(C<sub>1</sub>-C<sub>6</sub>-alkyl)-amino, C<sub>1</sub>-C<sub>6</sub>-alkylcarbonylamino, C<sub>1</sub>-C<sub>6</sub>-alkylsulfonyl, or C<sub>1</sub>-C<sub>6</sub>-alkylsulfinyl, wherein the carbon atoms in these groups may be substituted with

1 to 3 halogen, hydroxy, nitro, cyano, amino, mercapto, C<sub>1</sub>-C<sub>6</sub>-alkoxy, C<sub>1</sub>-C<sub>6</sub>-haloalkoxy, C<sub>1</sub>-C<sub>6</sub>-alkylthio, C<sub>1</sub>-C<sub>6</sub>-haloalkylthio, C<sub>1</sub>-C<sub>6</sub>-alkylsulfinyl, C<sub>1</sub>-C<sub>6</sub>-haloalkylsulfonyl, C<sub>1</sub>-C<sub>6</sub>-haloalkylsulfonyl, C<sub>1</sub>-C<sub>6</sub>-haloalkylsulfinyl, or C<sub>3</sub>-C<sub>6</sub>-cycloalkyl which may be substituted with 1 to 3 R<sup>#</sup> groups, or

 $R^{\#}$  is halogen, cyano, nitro, hydroxy, mercapto, amino,  $C_1$ - $C_6$ -alkoxy,  $C_2$ - $C_6$ -alkenyloxy,  $C_2$ - $C_6$ -alkynyloxy,  $C_1$ - $C_6$ -haloalkoxy,  $C_1$ - $C_6$ -alkylthio, or  $C_1$ - $C_6$ -haloalkylthio,  $C_1$ - $C_6$ -alkylsulfinyl,  $C_1$ - $C_6$ -alkylamino, di( $C_1$ - $C_6$ alkyl)-amino,  $C_1$ - $C_6$ -alkylcarbonyl,  $C_1$ - $C_6$ -alkoxycarbonyl, or di( $C_1$ - $C_6$ )-alkylaminocarbonyl;

formyl, C<sub>1</sub>-C<sub>6</sub>-alkylcarbonyl, C(=O)NR<sup>a</sup>R<sup>b</sup>, CO<sub>2</sub>R<sup>c</sup>, R<sup>d</sup>, R<sup>e</sup>, phenyl which may be substituted with 1 to 3 R<sup>#</sup> groups, or pyridyl which may be substituted with 1 to 3 R<sup>#</sup> groups,

R<sup>a</sup>, R<sup>b</sup>, R<sup>c</sup> are each independently hydrogen or C<sub>1</sub>-C<sub>4</sub>-alkyl which may be substituted with 1 to 3 groups R<sup>#</sup>;

$$R^d$$
 is  $NR^iR^j$  or 
$$N \xrightarrow{(CH_2)_p} X_r$$
 or  $CH \xrightarrow{(CH_2)_p} X_r$ 

 $R^{i}$ ,  $R^{j}$  are each independently hydrogen or  $C_{1}$ - $C_{4}$ -alkyl which may be substituted with 1 to 3 groups  $R^{\#}$ ;

p, m are each independently 0, 1, 2, or 3, with the proviso that p and m are not both 0;

Attorney Docket No. BASF.10153WOUS Page 9 of 14

International Application No.: PCT/EP2004/013685 International Filing Date: December 2, 2004

U.S. Application No. 10/580,700

Second Preliminary Amendment Dated: January 9, 2007

X is oxygen, sulfur, amino, C<sub>1</sub>-C<sub>4</sub>-alkylamino, or phenylamino, or, if p is 0 then X can also be phenoxy or C<sub>1</sub>-C<sub>6</sub>-alkoxy; r is 0 or 1;

R<sup>e</sup> is

 $R^k$ ,  $R^q$  are each independently hydrogen or  $C_1$ - $C_4$ -alkyl which may be substituted with 1 to 3 groups  $R^\#$ ; or

R<sup>1</sup> and R<sup>2</sup> may be taken together to form a ring represented by the structure

$$N \underbrace{{(CHZ)_p}_p}_{(CH_2)_m} X'_r$$

p, m are 1, 2 or 3;

X' is oxygen, sulfur, amino, C<sub>1</sub>-C<sub>4</sub>-alkylamino, phenylamino, or methylene;

Z is  $C_1$ - $C_4$ -alkyl or phenyl;

R<sup>3</sup> is hydrogen, C<sub>1</sub>-C<sub>10</sub>-alkyl, C<sub>2</sub>-C<sub>10</sub>-alkenyl, C<sub>2</sub>-C<sub>10</sub>-alkynyl, C<sub>3</sub>-C<sub>12</sub>-cycloalkyl, wherein the carbon atoms in these groups may be partially or fully halogenated or substituted with

1 to 3 cyano, nitro, hydroxy, mercapto, amino,  $C_1$ - $C_6$ -alkyl,  $C_3$ - $C_6$ -cycloalkyl,  $C_1$ - $C_6$ -alkoxy,  $C_1$ - $C_6$ -alkylamino, di( $C_1$ - $C_6$ -alkyl)-amino,  $C_1$ - $C_6$ -alkylsulfonyl, or  $C_1$ - $C_6$ -alkylsulfinyl groups, wherein the carbon atoms in these groups may be substituted by

1 to 3 halogen atoms, a 5- to 6-membered aromatic ring system which may contain 1 to 4 heteroatoms selected from oxygen, sulfur and nitrogen and which may be substituted with any combination of 1 to 5 halogen atoms, 1 to 3 C<sub>1</sub>-C<sub>6</sub>-alkyl, C<sub>1</sub>-C<sub>6</sub>-alkylthio, C<sub>1</sub>-C<sub>6</sub>-alkylsulfonyl, C<sub>1</sub>-C<sub>6</sub>-alkylsulfinyl, C<sub>1</sub>-C<sub>6</sub>-alkoxy, nitro, or cyano groups, wherein the carbon atoms in these groups may be substituted by 1 to 3 halogen atoms, or

phenoxy, which may be substituted with any combination of 1 to 5 halogen atoms, 1 to 3 C<sub>1</sub>-C<sub>6</sub>-alkyl, C<sub>1</sub>-C<sub>6</sub>-alkylthio, C<sub>1</sub>-C<sub>6</sub>-alkylsulfinyl, C<sub>1</sub>-C<sub>6</sub>-alkoxy, nitro, or cyano

Attorney Docket No. BASF.10153WOUS
Page 10 of 14

International Application No.: PCT/EP2004/013685 International Filing Date: December 2, 2004

U.S. Application No. 10/580,700

Second Preliminary Amendment Dated: January 9, 2007

groups, wherein the carbon atoms in these groups may be substituted by 1 to 3 halogen atoms, or

a 3- to 6-membered saturated or partially unsaturated ring system which contains 1 to 3 heteroatoms selected from oxygen, sulfur and nitrogen and which may be substituted with any combination of 1 to 5 halogen atoms, 1 to 3 C<sub>1</sub>-C<sub>6</sub>-alkyl, C<sub>1</sub>-C<sub>6</sub>-alkylthio, C<sub>1</sub>-C<sub>6</sub>-alkylsulfonyl, C<sub>1</sub>-C<sub>6</sub>-alkylsulfinyl, C<sub>1</sub>-C<sub>6</sub>-alkoxy, nitro, or cyano groups, wherein the carbon atoms in these groups may be substituted by 1 to 3 halogen atoms,

a 3- to 6-membered saturated or partially unsaturated ring system which contains 1 to 3 heteroatoms selected from oxygen, sulfur and nitrogen and which is unsubstituted or substituted with any combination of 1 to 5 halogen atoms, 1 to 3 C<sub>1</sub>-C<sub>6</sub>-alkyl, C<sub>1</sub>-C<sub>6</sub>-alkylthio, C<sub>1</sub>-C<sub>6</sub>-alkylsulfonyl, C<sub>1</sub>-C<sub>6</sub>-alkylsulfinyl, C<sub>1</sub>-C<sub>6</sub>-alkoxy, C<sub>1</sub>-C<sub>6</sub>-haloalkoxy, nitro, or cyano groups, wherein the carbon atoms in these groups may be substituted by 1 to 3 halogen atoms;

R,  $R^4$  are each independently hydrogen or  $C_1$ - $C_6$ -alkyl,  $C_1$ - $C_6$ -alkoxycarbonyl,  $C_1$ - $C_6$ -alkylaminocarbonyl, or di( $C_1$ - $C_6$ -alkyl)-aminocarbonyl, wherein the carbon atoms in the these groups may be substituted with 1 to 3 groups  $R^\#$ ;

A is  $C-R^5$  or N;

B is  $C-R^6$  or N;

W is  $C-R^7$  or N;

with the proviso that one of A, B and W is other than N;

R<sup>5</sup>, R<sup>6</sup>, R<sup>7</sup> are each independently hydrogen, halogen, nitro, cyano, amino, mercapto, hydroxy, C<sub>1</sub>-C<sub>10</sub>-alkyl, C<sub>2</sub>-C<sub>10</sub>-alkenyl, C<sub>2</sub>-C<sub>10</sub>-alkynyl, C<sub>3</sub>-C<sub>6</sub>-cycloalkyl, C<sub>1</sub>-C<sub>6</sub>-alkoxy, C<sub>1</sub>-C<sub>6</sub>-alkylamino, di(C<sub>1</sub>-C<sub>6</sub>-alkyl)-amino, C<sub>1</sub>-C<sub>6</sub>-alkylthio, C<sub>1</sub>-C<sub>6</sub>-alkylsulfonyl, or C<sub>1</sub>-C<sub>6</sub>-alkylsulfinyl, wherein the carbon atoms in these groups may be substituted with 1 to 3 groups R<sup>#</sup>

a 5- to 6-membered aromatic ringsystem which may contain 1 to 4 heteroatoms selected from oxygen, sulfur and nitrogen and which may be substituted with any combination of 1 to 5 halogen atoms, 1 to 3 C<sub>1</sub>-C<sub>6</sub>-

U.S. Application No. 10/580,700

Second Preliminary Amendment Dated: January 9, 2007

alkyl,  $C_1$ - $C_6$ -haloalkyl,  $C_1$ - $C_6$ -alkylthio,  $C_1$ - $C_6$ -haloalkylthio,  $C_1$ - $C_6$ -alkylsulfinyl,  $C_1$ - $C_6$ -haloalkylsulfinyl,  $C_1$ - $C_6$ -haloalkylsulfinyl,  $C_1$ - $C_6$ -haloalkoxy, mercapto, hydroxy, amino, nitro, or cyano groups, wherein the carbon atoms in these groups may be substituted with 1 to 3 groups  $R^{\#}$ ;

- Y is hydrogen, halogen, cyano, nitro, amino, hydroxy, mercapto, C<sub>1</sub>-C<sub>6</sub>-alkyl, C<sub>2</sub>-C<sub>10</sub>-alkenyl, C<sub>2</sub>-C<sub>10</sub>-alkynyl, C<sub>3</sub>-C<sub>6</sub>-cycloalkyl, C<sub>1</sub>-C<sub>6</sub>-alkoxy, C<sub>1</sub>-C<sub>6</sub>-alkylamino, di(C<sub>1</sub>-C<sub>6</sub>)-alkylamino, C<sub>1</sub>-C<sub>6</sub>-alkylthio, C<sub>1</sub>-C<sub>6</sub>-alkylsulfonyl, or C<sub>1</sub>-C<sub>6</sub>-alkylsulfinyl, wherein the carbon atoms in these groups may be substituted with 1 to 3 groups R<sup>#</sup>;
- n is 0, 1, or 2;

or an enantiomer or diastereomer, veterinarily acceptable salt or ester thereof; and

dissolving the compound of formula I in a physiologically tolerable carrier.

Claim 25 (New): The process according to claim 24, wherein the physiologically tolerable carrier is a solvent comprising water, ethanol, butanol, benzyl alcohol, glycerol, propylene glycol, polyethylene glycol, N-methyl-pyrrolidone, 2-pyrrolidone, polypropylene glycol, phenyl ethanol, phenoxy ethanol, ethyl acetate, butyl acetate, benzyl benzoate, dipropyleneglycol monomethylether, acetone, methylethylketone, aromatic hydrocarbons, vegetable oils, synthetic oils, dimethylformamide, dimethylacetamide, transcutol, solketal, propylenecarbonate or mixtures thereof.

Claim 26 (New): The process according to claim 24, wherein the physiologically tolerable carrier is an oil comprising a vegetable oil or synthetic oil suitable for injection.

Claim 27 (New): The process according to claim 24, further comprising adding a thickener to the physiologically tolerable carrier.

Claim 28 (New): The process according to claim 27, wherein the thickener is bentonite, colloidal silicic acid, aluminium monostearate, a cellulose derivative, a polyvinyl alcohol or a copolymer of a polyvinyl alcohol, an acrylate or a methacrylate.

Claim 29 (New): The process according to claim 27, wherein the composition is a gel.

U.S. Application No. 10/580,700

Second Preliminary Amendment Dated: January 9, 2007

Claim 30 (New): The process according to claim 24, wherein the carrier comprises a hydrophobic phase, a hydrophilic phase and an emulsifier such that the compound of formula I and the carrier forms an emulsion.

Claim 31 (New) The process according to claim 30, wherein the compound of formula I is dissolved in one of the hydrophobic phase or the hydrophilic phase, and is homogenized with the emulsifier and the other phase.

Claim 32 (New): The process according to claim 24, wherein the physiologically tolerable carrier comprises one or more physiologically tolerable solid inert substances.

Claim 33 (New) The process according to claim 32, wherein the solid inert substance is selected from the group consisting of sodium chloride, calcium carbonate, hydrogencarbonates, aluminium oxides, titanium oxide, silicic acids, argillaceous earths, precipated or colloidal silica, phosphates, sugar, cellulose, milk powder, animal meal, grain meals and starches.

Claim 34 (New): The process according to claim 24 wherein the compound of formula I is a compound of formula I-B

$$R^7$$
 $N$ 
 $N$ 
 $R^{33}$ 
 $R^{31}$ 
 $R^{31}$ 
 $R^{32}$ 
 $R^{31}$ 
 $R^{31}$ 
 $R^{32}$ 
 $R^{31}$ 

wherein

R<sup>7</sup> is chlorine or trifluoromethyl;

R<sup>5</sup> and Y are each independently chlorine or bromine;

R<sup>2</sup> is C<sub>1</sub>-C<sub>6</sub>-alkyl, C<sub>3</sub>-C<sub>6</sub>-alkenyl, C<sub>3</sub>-C<sub>6</sub>-alkynyl, or

C<sub>3</sub>-C<sub>6</sub>-cycloalkyl which may be substituted with 1 to 3 halogen atoms, or

C<sub>2</sub>-C<sub>4</sub>-alkyl which is substituted by C<sub>1</sub>-C<sub>4</sub>-alkoxy;

R<sup>31</sup> and R<sup>32</sup> are C<sub>1</sub>-C<sub>6</sub>-alkyl or may be taken together to form C<sub>3</sub>-C<sub>6</sub>-cycloalkyl which may be unsubstituted or substituted by 1 to 3 halogen atoms;

U.S. Application No. 10/580,700

Second Preliminary Amendment Dated: January 9, 2007

R<sup>33</sup> is hydrogen or C<sub>1</sub>-C<sub>6</sub>-alkyl,

or the enantiomers or veterinarily acceptable salts thereof.

Claim 35 (New): The process according to claim 24 wherein the compound of formula I is a compound of formula I-1

Claim 36 (New): The process according to claim 24 wherein the compound of formula I is a compound of formula I-2